The Investor's Edge

September 30, 2016

C.W. HENDERSON & ASSOCIATES, INC.
INVESTMENT COUNSELORS SPECIALIZING IN TAX-EXEMPT MUNICIPAL SECURITIES

Fed Delays Again

Citing global uncertainty, tepid U.S. economic growth and low inflation, the Federal Open Market Committee decided at its late September meeting to maintain the targeted Federal Funds rate in the 0.25% to 0.50% range where it has been since December. U.S. RGDP growth in the first two quarters of this year was sluggish at 0.80% and 1.40%, respectively, while the year-over-year advance in the CPI through August was a modest 1.00%. The Core CPI, that excludes food and energy, advanced at a 2.2% pace for year ended in August but the Fed's preferred measure, the Personal Consumption Expenditures Index, rose at a below target 1.60% rate. The pending presidential election, with both candidates favoring tax reform and trade restrictions, may have also influenced the Fed's decision to wait.

Chairwoman Yellen's comments after the meeting suggested that a rate increase in December was on the table, but, once again, dependent on economic conditions. The Fed's domestic GDP forecast for growth of only about 2.0% for the next several years suggests that monetary policy will likely remain accommodative for the foreseeable future with infrequent and measured rate increases.

The vote at the September FOMC meeting was not unanimous. Three dissenting members argued for a rate hike, voicing their concern that a likely pick up in second half growth combined with continued employment gains and building wage pressures could kindle inflation pressures.

Sluggish growth in the first half of the year caused longer interest rates to drop sharply with the ten year Treasury yield falling from 2.27% at 2015 year end to a low of 1.37% in early July. The expectation of somewhat stronger growth in the second half of this year subsequently moved the ten year Treasury yield back to 1.72%. Long municipal rates followed a similar pattern with ten year prime tax-exempt yields falling from 1.94% at year end to a low of 1.31% in July before moving to the 1.60% current level. The following table details quarter end and current prime tax-exempt yield levels.

Prime Tax-Exempt Yields

	10/05/16	6/30/16	3/31/16	12/31/15
1 Yr.	0.79%	0.55%	0.55%	0.51%
5 Yrs.	1.06	0.89	1.09	1.26
10 Yrs.	1.60	1.35	1.70	1.94
15 Yrs.	2.02	1.66	2.14	2.28
20 Yrs.	2.27	2.89	2.44	2.54
30 Yrs.	2.43	2.02	2.67	2.80

Our base assumption looking forward is that economic growth will remain muted for the foreseeable future with annual GDP growth averaging around 2.0%. A modest pickup in inflation seems possible, but a sharp acceleration does not appear to be in the cards. Some upward rate pressure would not be surprising prompted by periodic Fed moves that translate into moderate yield increases in longer rates. A flatter curve is likely.

We remain defensive. The prospect of somewhat higher rates, heightened volatility and the possibility of widening credit spreads argues for a continued focus on credit quality and limited portfolio durations.

Global Yield Search

With an estimated $11 trillion of sovereign debt with negative yields in Europe and Japan, global investors have scoured the markets in search of securities providing positive returns. As we have commented in recent newsletters, the large yield advantage offered on U.S. securities has created strong foreign demand for U.S. taxable and municipal bonds. European demand has also prompted sales of long (fifty and hundred year maturity) securities by several European countries including France, Belgium, Spain, Ireland and Italy. Italy's latest sale was a five billion Euro issue maturing in 2067 priced to yield 2.85%. Purchases of long maturity securities by pension funds that need to match liabilities have merit, but extended maturities make these bonds extremely vulnerable to credit deterioration and interest rate volatility risk.

Money Market Reform Impact

As discussed in our March 31 Newsletter, new rules regarding the management of money market funds become effective this month. Non-U.S. Government funds can be subject to gates (restrictions on withdrawals) and exit fees (up to 2.0%) if a fund's liquidity falls below proscribed levels. In addition, Institutional Funds (funds with non-natural person investors) must have floating net asset values calculated to four decimal places (e.g. 1.0005; 0.9995; etc.). We have instructed client custodians to sweep cash in the accounts we manage into U.S. Treasury and Government funds wherever possible.

Investor reaction has been dramatic. Money market funds, including municipal money market funds, have experienced huge outflows in recent months as investors have responded to potential withdrawal restrictions. Short term tax-exempt yields have soared in response to the market disruption. Three month prime T/E yields that started the year at about 17 basis points are now yielding in excess of eighty basis points. With three month Treasury Bills yielding a significantly lower 0.29%, the short municipal market is providing excellent value. C.W. Henderson's Short Term product, with an effective duration range of six to eight months, provides an attractive vehicle in this environment for cash pools with intermediate investment horizons.

Heightened Duration Risk

Inherent risk exists in the current low interest rate environment. A bond's volatility risk (change in dollar price as yields change) increases as market yield levels decline. Volatility risk also

increases with lower coupon bonds. The volatility characteristic of a bond, or bond portfolio, is measured by duration which indicates the dollar price change that is likely to occur as market yields change (e.g. the dollar price of a bond with a duration of ten will move, up or down, by approximately 10% if market interest rates move 1.0%). Until recently many municipal new issues were structured with 5.0% coupons. Bonds with 5.0% coupons have high dollar prices but reasonable durations in the current low yield environment. Underwriters have recently been structuring new issues with 3.0% and 2.0% coupons in response to casualty insurance company demand for tax-exempt income and individual investor aversion to securities with high dollar prices. Duration and potential volatility have increased significantly with these lower coupon securities. As shown below, the duration of a ten year non-callable bond with a 5.0% coupon increases about 6.6% as market yields decline from 5.0% to 1.0% (8.30/7.79). As coupons decline the duration extension becomes more pronounced. A 2.0% coupon bond at a 1.0% yield to maturity has a 10.4% longer duration than a 5.0% coupon bond at the same yield (9.16/8.30).

Modified Duration – Ten Year Maturity Bonds

	Yield to Maturity				
	5.0%	4.0%	3.0%	2.0%	1.0%
Coupons: 5.0%	7.79	7.92	8.05	8.17	8.30
4.0%	8.06	8.18	8.30	8.41	8.53
3.0%	8.36	8.48	8.58	8.69	8.80
2.0%	8.73	8.83	8.93	9.02	9.16

Given the current low interest rate environment it is important for investors to be aware of the duration risk in their portfolios when making coupon and maturity selections.

Convexity Risk

Bonds with low coupons and short calls have poor risk/reward characteristics. Yield shifts can cause yield to worst pricing to move from a bond's call date to maturity as yields rise. Consider a 3.0% coupon bond with a twenty year maturity and a five year par call that is priced at 1.50% yield to call. The bond will have a dollar price of 107.20. If short rates decline fifty basis point and the bond is priced at 1.0% to the call, the dollar price would increase to 109.73, a 2.40% gain. However, should yields rise with twenty year rates at 3.50%, yield to worst pricing will shift to the maturity with a dollar price decline, ignoring de minimis, to 92.85. In addition, a purchaser of this discount bond would be required to pay ordinary income tax on the principal appreciation back to par. The bond's price will therefore decline further to about 89 to compensate for the de minimis tax effect. Total downside risk is about 17% versus 2.4% upside potential. This reflects negative convexity risk. Significant downside risk if rates rise and limited price appreciation if rates fall.

C.W. Henderson's focus on using higher coupon bonds in portfolio constructions moderates duration extensions, controls convexity risk and lessens de mininis risk.

Spread Risk

Declining nominal interest rates over the past several years prompted investors to reach for yield. High dividend stocks and lower quality bonds have been recipients of these flows. The search for yield also caused yield spreads between municipal quality sectors to narrow dramatically. The differential between AAA and BBB yields exceeded 300 basis points in 2009 but declined sharply in the following years. The table below provides a comparison of current quality spreads with those that existed three and four years ago.

	Current			9/30/13			9/30/12		
	AAA	BBB	Spread	AAA	BBB	Spread	AAA	BBB	Spread
1Yr.	0.79%	1.39%	60 BP	0.18%	1.12%	94 BP	0.19%	1.18%	99 BP
5 Yrs.	1.06	1.85	79	1.32	2.58	126	0.63	2.29	166
10 Yrs.	1.60	2.48	88	2.55	4.13	158	1.66	3.54	188
15 Yrs.	2.02	2.93	91	3.30	4.91	161	2.10	3.98	188
20 Yrs.	2.27	3.18	91	3.77	5.17	140	2.42	4.23	181
30 Yrs.	2.43	3.33	90	4.10	5.40	130	2.82	4.44	162

Significantly wider spreads may not reoccur for some time, but spread risk exists and should be recognized in constructing portfolios. The objective of C.W. Henderson's focus on utilizing only high quality securities with good liquidity characteristics is to reduce the risk of both rating downgrades and spread widening.

Firm News

We are pleased to announce that C.W. Henderson's assets under management have moved above $3 billion. We remain extremely grateful for the support of our clients, partners and friends as the Firm continues to grow.

We are also pleased to welcome Alison Olexa to C.W. Henderson & Associates. A recent University of Wisconsin graduate (Go Badgers!), she has joined the Operations/Client Service team with Clare Retrum and Shannon Flavin.

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